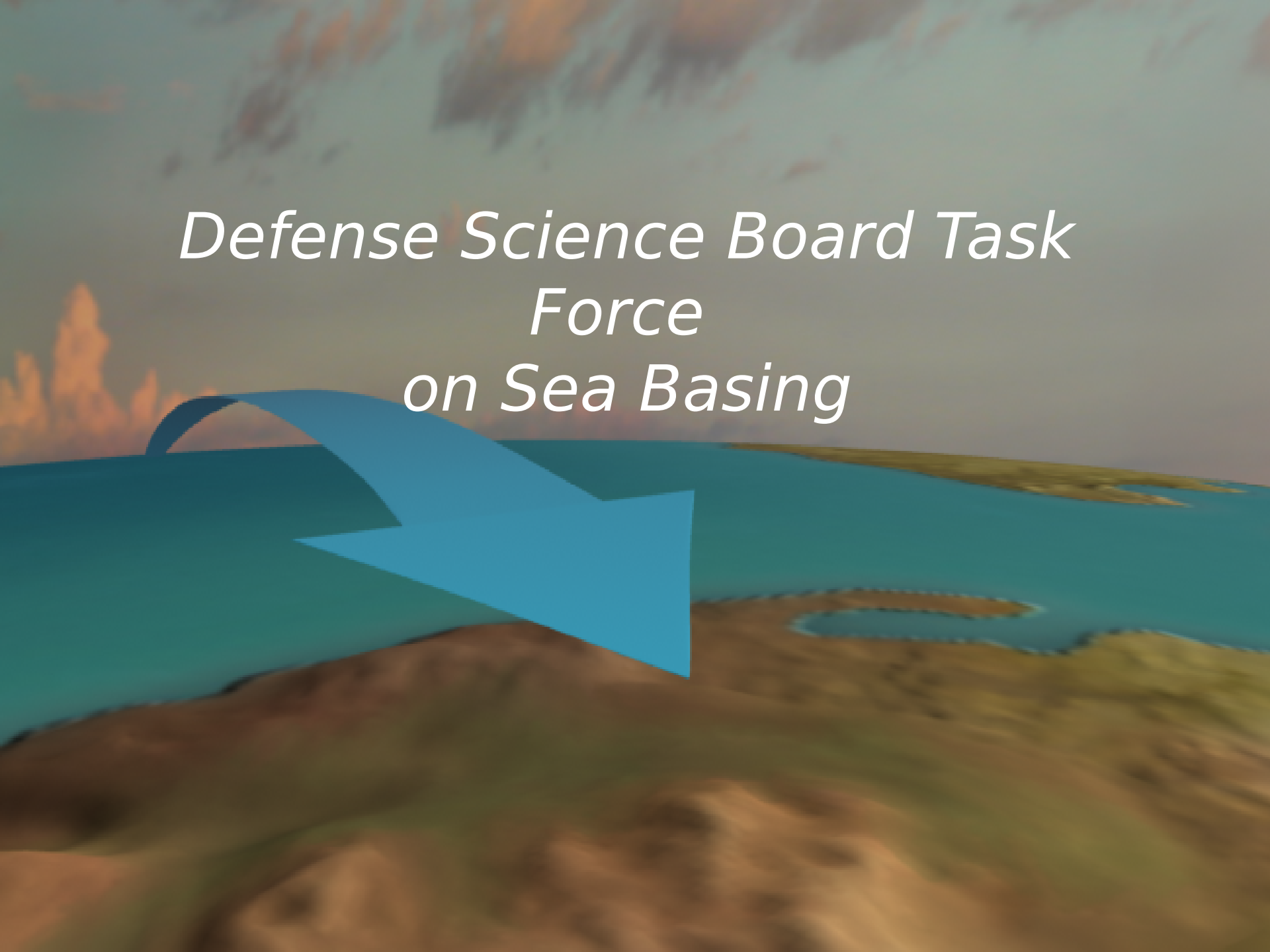
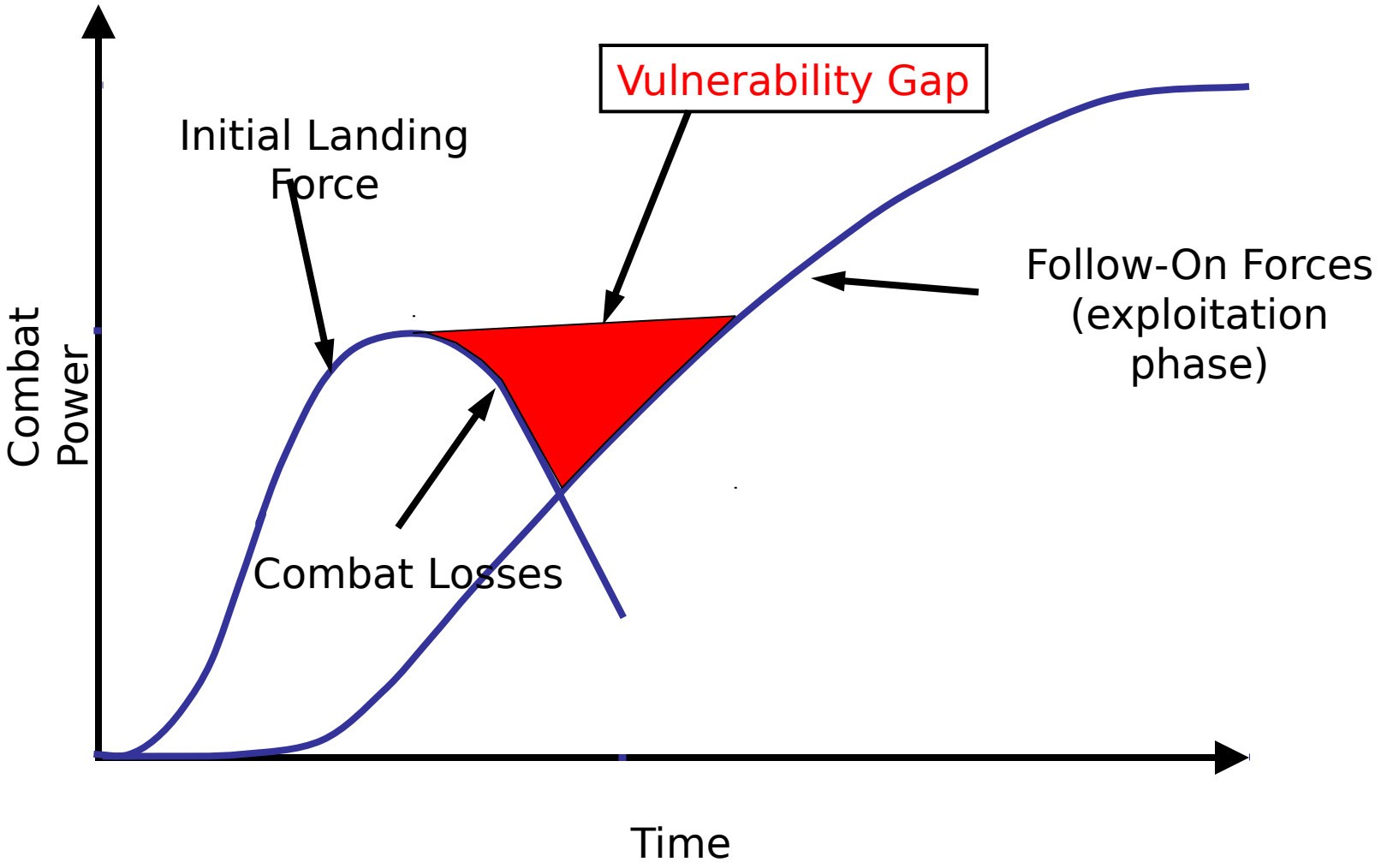

Defense Science Board Task Force
on Sea Basing

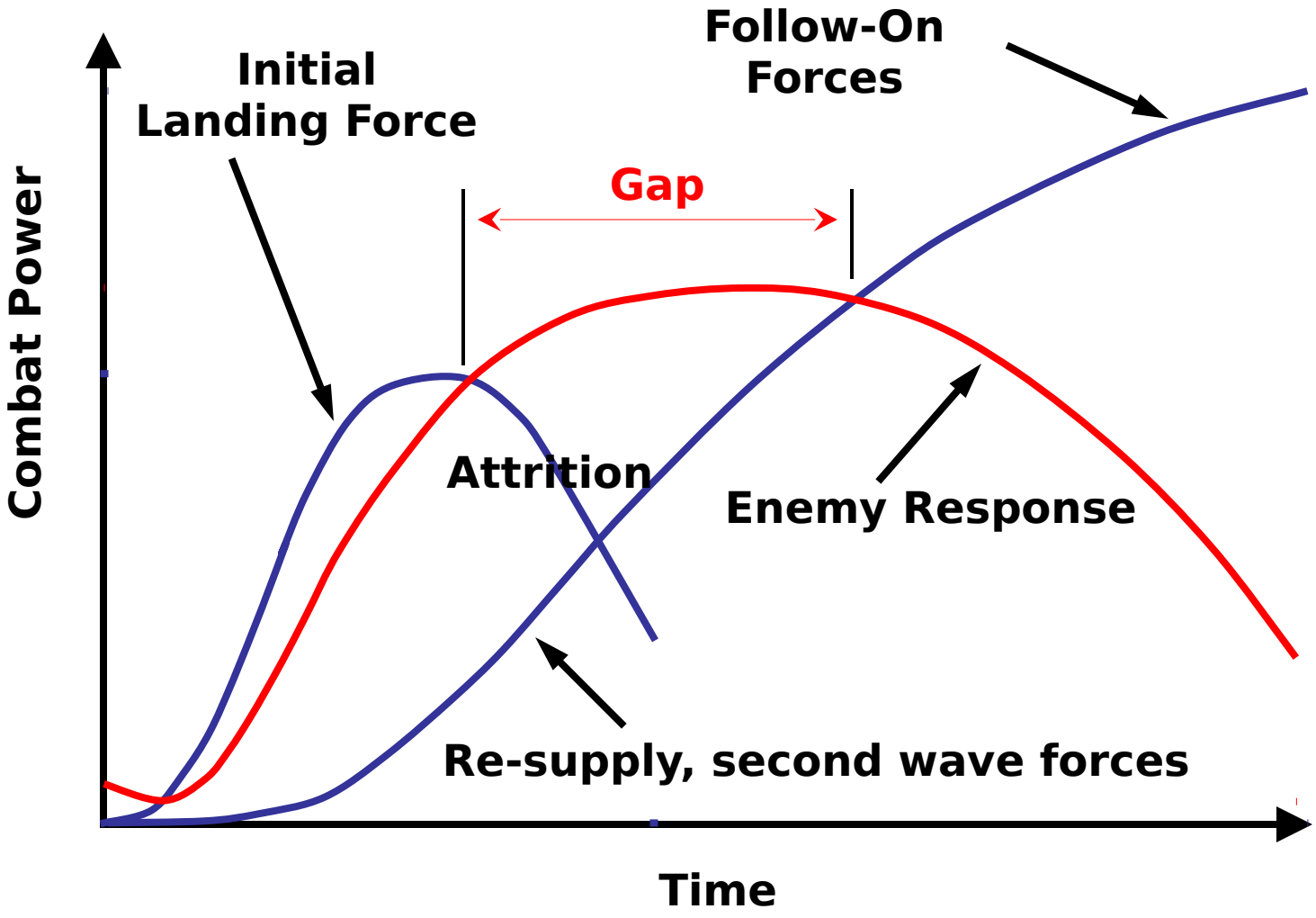
Summary of Conclusions

- Sea basing - a ***critical future national competence*** for assuring access to areas where United States military forces are denied access to support facilities
- Future sea basing needs are ***well beyond*** today's USMC and Navy operating capabilities
- The complexity and difficulty of sea basing requires a ***coordinated, spiral development effort*** to address identified issues and create a joint sea basing system of systems
- The United States should ***realistically test*** its sea basing capabilities to work out problems and develop leadership skills in all Services

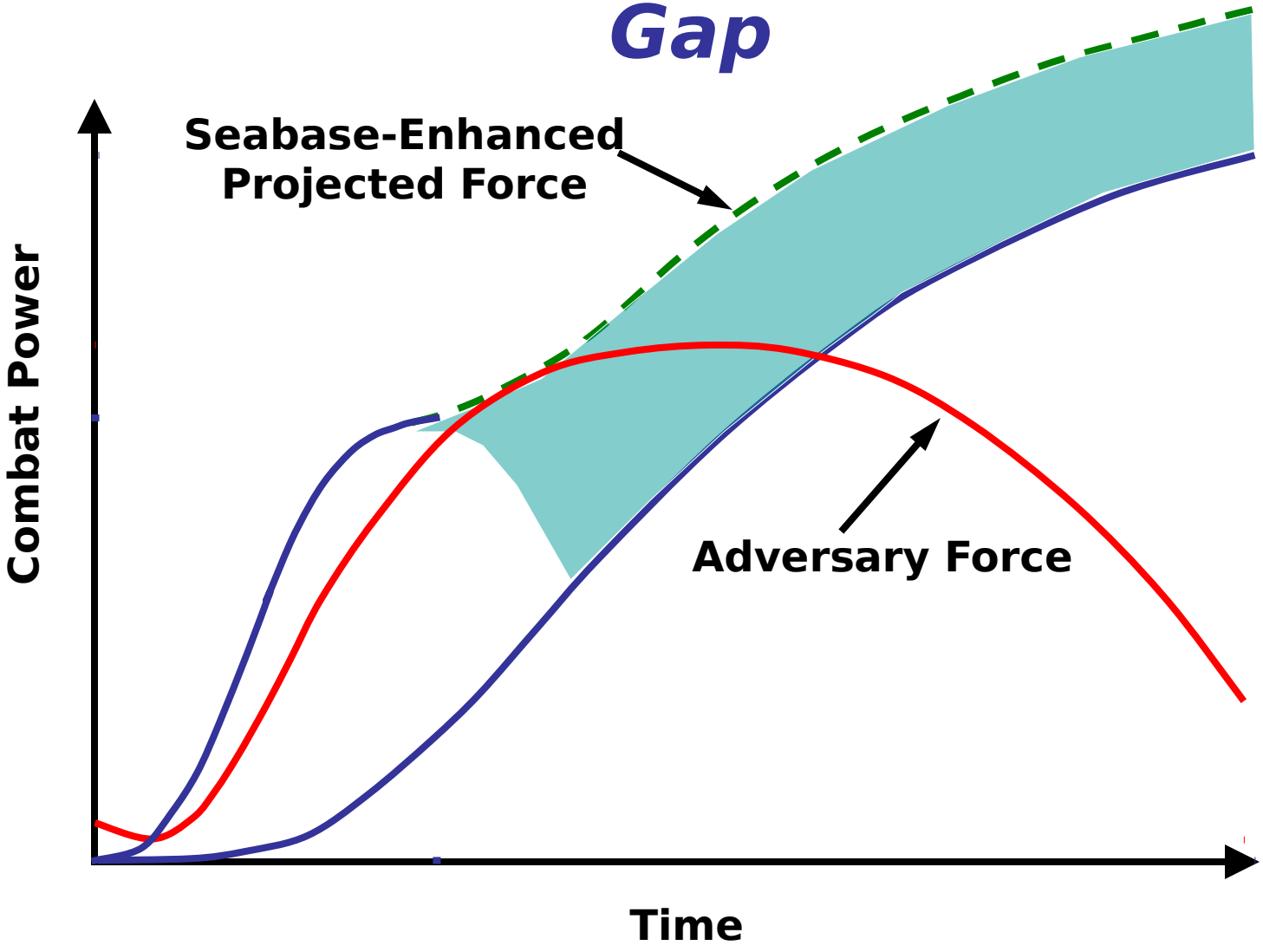
Expeditionary Operations Profile



The Vulnerability Gap Results from a Net Force Deficit



Sea-Based Sustainment can Reduce or Eliminate Vulnerability Gap



Forcible Entry from the Sea Requires

- All functions performed on the seabase
  - Moving forces, materiel, and weapons from an advanced base (or CONUS) to the seabase
  - At sea reception, staging, onward movement and integration
  - Getting the force to the objective and sustaining it
  - Sea, air and land platforms working in concert to project power to the objective (including ESG, CSG, MPG, CLF, air and sea links plus lighterage)
  - Defense suppression
- A ***joint system*** extending across interoperable platforms, netted together and sustained from the sea
- ***Much more than logistics – it's operations!***

The Seabase System of Systems

It's not just a bunch of ships

- Consists of interacting platforms and capabilities
- Must conform to an overall architecture
  - Allows for progression from the present to the future
  - Allows for CONUS-to-seabase deployment and sustainment using military and commercial transport
- Self defense
  - Capability for optimally pairing fires and force protection
- Can sustain operations for prolonged periods
  - Until follow-on forces arrive
  - Serve as a support base thereafter
- C4ISR systems
- Logistic systems
- Naval surface fire support

The Dirty Dozen

- Twelve Issues the Department must address
  - ***Management***
    1. **A Joint Sea Base Program Office**
       - ***Re-task and reorganize*** existing offices
       - ***Ensure meaningful participation*** by the Army and Air Force in forming a joint capability
  - ***Planning***
    2. **Sustaining Troops Ashore**
    3. **Protecting the Force Ashore**
    4. **Countering Threats**
       - Mines, sea-skimming missiles, subs, small boats
    5. **Concepts of Operations**
       - At sea RSOI, deployment, force protection, sustainment

The Dirty Dozen (cont)

- ***New Capabilities***
  6. **Cargo transfer at sea**
     - Inter-modal TEUs at SS4
  7. **Long-range, heavy lift aircraft**
     - HSVs, lighterage, sea-going cargo cranes, skin-to-skin transfer
  8. **Ships**
     - The platforms of sea basing
  9. **Communication architecture**
     - A shared data architecture with sufficient bandwidth, redundancy and robustness
  10. **Logistic support system**
     - Ability to handle all Service materiel interchangeably
  11. **Inter-theater lift**
     - HSVs, lighterage, sea-going cargo cranes, skin-to-skin transfer capabilities that can operate at SS4
- ***Resources***
  12. **Development speed and funding**
     - Creative ways to develop and fund construction of a modern sea basing capability

Critical Seabase Capabilities Needed

- Improved cargo handling
  - High-tech sea cranes
  - Skin-to-skin transfer
  - Lighters capable of matching the motion of supply ships
  - Not JLOTS
- Heavy lift air vehicles
  - Quad tilt-rotor
  - Large single rotor
  - Fixed-wing
  - Lighter than air cargo movers (e.g., HULA)
- New ships
  - LHA(R) and MPF(F) seabase platforms for heavy lift air vehicles
  - Semi-submersible platforms
  - Automated warehouse ships

Recommendations

- ***Make Sea Basing Joint***
- ***Address the 12 critical issues*** identified in this study – termed the Dirty Dozen
  - Establish management, R&D, development and integration of sea basing elements
- Develop ***at-sea cargo handling capabilities*** that can withstand sea state 4
- Initiate planning and development of a ***sea basable, heavy-lift aircraft*** with a minimum 20 ton capacity and theater-wide range ***as well as the ships from which they will operate***
- Periodically ***exercise sea basing***
- ***Elevate littoral warfare*** in all the Services

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